

### REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 41-47 are pending in this application, Claims 46 and 47 having been presently amended. Support for amended Claims 46 and 47 can be found, for example, in the original claims, drawings, and specification as originally filed.<sup>1</sup> No new matter has been added.

In the outstanding Office Action, Claims 46 and 47 were rejected under 35 U.S.C. § 102(b) as anticipated by Tiao et al. (U.S. Patent No. 6,318,863; hereinafter "Tiao"); and Claims 41-45 were rejected under 35 U.S.C. § 103(a) as unpatentable over Tiao in view of Li (U.S. Patent No. 6,587,269).

In response to the rejections under 35 U.S.C. §§ 102 and 103, Applicants respectfully submit that amended independent Claim 46 recites novel features clearly not taught or rendered obvious by the applied references.

Amended independent Claim 46 is directed to an illumination arrangement including, *inter alia*:

...a solid state light source;

a light collecting, integrating and re-directing device configured to receive at least a part of emitted light from said solid state light source and to redirect said received light; and

a light coupling mechanism configured to improve coupling efficiency of said emitted light from said solid state light source to said light collecting, integrating and redirecting device,

wherein the light coupling mechanism includes a refraction index matching means directly coupling the light collecting, integrating and re-directing device to the solid state light source.

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<sup>1</sup> See page 3, line 32 to page 4, line 7; and page 8, line 25 to page 9, line 24 of the specification.

Independent Claim 47 recites substantially similar features as independent Claim 46. Thus, the arguments presented below with respect to Claim 46 are also applicable to Claim 47.

Page 3 of the outstanding Office Action equates the taper light pipe 212 of Tiao, which is located between the light source 202 and the taper light pipe 220, to Applicants' "light coupling mechanism." However, Tiao fails to teach or suggest "a light coupling mechanism configured to improve coupling efficiency of said emitted light from said solid state light source to said light collecting, integrating and redirecting device, wherein the light coupling mechanism includes a refraction index matching means directly coupling the light collecting, integrating and re-directing device to the solid state light source," as in Applicants' Claim 46.

Applicants' light coupling mechanism is not described by Tiao as the taper light pipes 212 and 220 are described as separate components. Thus, Tiao does not describe that the taper light pipe 212 includes a refraction index matching means directly coupling the taper light pipe 220 to the light emitting module 202. Thus, Applicants respectfully submit that Applicants' independent Claims 46 and 47 (and all claims depending thereon) distinguish over Tiao.

In addition, Applicants respectfully submit that Li fails to cure any of the above-noted deficiencies of Tiao. Li describes gaps 70 of optically clear material positioned between the optical components to encourage the occurrence of total internal reflection that minimizes the loss of the optical energy by the polarization recovery system.<sup>2</sup> However, Li is directed towards a different field of endeavor than that of Applicants' invention which aims to provide an illumination arrangement using only low light output capabilities and allowing an easy and reliable optical coupling of the primary illumination light from the solid state light source

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<sup>2</sup> See the abstract of Li.

device to projection optics. Therefore, in Applicants' invention, the light coupling mechanism is a direct coupling between the light source and the light collecting, integrating and redirecting device, which is achieved by a refraction index matching means that is not taught or suggested by Tiao in view of Li. In addition, due to the fundamental differences of the gap 70 in Li from Applicants' refraction index matching means, a person ordinarily skilled in the art would not be motivated to substitute the gap 70 of Li into the device of Tiao.

Accordingly, Applicants respectfully submit that amended independent Claim 46 (and all claims dependent thereon) patentably distinguishes over Tiao and Li.

Accordingly, Applicants respectfully request the rejections under 35 U.S.C. § 102 and 103 be withdrawn.

Consequently, in view of the present amendment, and in light of the above discussion, the pending claims as presented herewith are believed to be in condition for formal allowance, and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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